

**Public Oral Testimony Summary**  
**Sept. 29 and Oct. 14, 2022 Public Hearings**  
**Proposed 2021 Washington State Energy Code – Residential**

Name	Group if applicable	Subject	Stance	Summary
<b>September 29 Public Hearing</b>				
Andrea Smith	BIAW	WSEC-R: 084, 079, 065, 066, 089, 080, 073 option 1&2	Oppose	Flawed process—need to perform the third party cost analysis and have the Plumbing TAG review the R406 options pertaining to plumbing. Increases the cost of housing and contributes to housing shortage.
Ty Jennings		WSEC-R Equipment options (065, 066)	Oppose	Expensive measure that goes well above any other state’s requirements. Gas has a role to play in carbon emissions reduction and eliminating the option does a disservice to homeowners.
Jonathan Kocher	RMI	WSEC-R Heat Pump Proposals (065, 066)	Support	Encourage you to pass all proposals, esp. the heat pump proposals. They are modest and an essential step towards decarbonizing the building sector. Building produce half of all greenhouse gas emissions. All electric homes cost less to build than mixed fuel homes.
Ryan Mello	Pierce County Council Member	WSEC-R Heat Pump proposals (065, 066)	Support	As a local lawmaker, encourage the Council to adopt the updates and move away from gas for healthier and more affordable homes. Jurisdictions need this support from the Council to achieve their goals. Greenhouse gas production has increased in the last few years, we need to stop going backwards.
Naghmana Sheraz		WSEC-R Heat Pumps Proposal (065, 066)	Support	Most gas used in Washington is provided through fracking. Fracking impacts the environment and contributes to water contamination. Housing is the fastest growing source of greenhouse gas. Indoor air is more polluted than outdoor air. This is the lowest cost pathway forward. Please adopt these changes.

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Dan Welch	[bundle] design studio	WSEC-R	Support	Support approving the energy code updates. Buildings are the largest and fastest growing source of carbon emissions. Need to move to all electric buildings to meet climate goals. Have been building homes that use these strategies for the past nine years. Technology and availability have improved over that time. The changes meet state climate action targets and occupants have healthy, comfortable, durable homes that are less costly to operate.
Martin Gibbins	League of Women Voters of WA	WSEC-R Heat Pump proposals (065, 066)	Support	Speaking for the 2200 league members in support of heat pumps. Climate change is a threat to good governance and equity of residents. Methane leakage and burning byproducts degrade the health of residents, esp. children. We also support the increased ventilation in homes.
Coleen Anderson	350 Climate Action	Heat Pump Proposals (065, 066)	Support	In support of heat pumps. Concerned for her grandchildren's health and safety with fossil fuel air pollution. We are seeing more people injured or dying from the effects of the climate crisis. Homes with gas stoves have 50-400 percent higher nitrogen dioxide levels and pose a 42 percent increased risk of asthma. Retrofits are more expensive.
Cristina Mateo	WA Build Back Black Alliance	WSEC-R Housing Energy Codes and Heat Pumps (065, 066)	Support	Many members of the BIPOC community are directly affected. Urge adoption of the updates because moving away from methane gas is important. Lower income households have a higher risk of exposure due to small size. Clean energy is imperative, especially for underrepresented families.
Holly Townes		Heat Pump proposals (065, 066)	Support	ASHRAE has made it clear that transitioning to heat pumps is the most cost effective way to address climate change. It is less expensive to make this change in new construction than to

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				retrofit. Some may feel threatened by this change, but we must transition to clean energy.
Ali Lee	Climate Solutions	WSEC-R Heat pump proposals (065, 066)	Support	You have the opportunity to improve both indoor and outdoor air quality. BIPOC and poor communities are more heavily impacted by air pollution. Gas appliances created air pollution. Climate change is creating insufferable conditions in the summer months. Heat pumps for heating and cooling can help alleviate the impact.
Sameth Mell	Spean Raja	WSEC-R Heat pump proposals (065, 066)	Support	We have been working with King County on their heat pump program. We know that adopting clean energy codes has positive impacts and benefits future generations. Cleaner energy leads to safer buildings and healthier communities.
Brian DeHart		WSEC-R	Support	Urges the adoption of energy code updates to ensure new homes are built without methane emitting natural gas. Heat pumps are two to three times more efficient than gas heaters. Methane leaks as it is transported. Using heat pumps means cleaner, healthier air and be able to meet the statewide emission targets while using less electricity. Operating costs for heat pumps are lower than gas and provides for air conditioning.
Heidi Cody		WSEC-R Heat Pump proposals (065, 066)	Support	Vancouver WA is poised to adopt an ambitious climate action plan. There is no way to achieve this goal without getting gas out of buildings. Electrification is the fastest way to get gas out of buildings. We need to transition away from fossil fuels immediately.
Joe Kear		WSEC-R Heat Pump (065, 066)	Support	As a duct tester, I can say ducted systems are not as efficient if the ducts are outside the building envelope. The most efficient system is a ductless system and heat pumps are more

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				efficient than forced air or gas. Supports the proposed code change to move away from fossil fuels.
Neal Anderson		Heat Pump proposals (065, 066)	Support	The gas industry has argued against heat pumps, but hasn't offered details on how they will deliver cleaner, less carbon intensive gas. They're relying on green hydrogen, which is still less efficient than heat pumps, and takes more energy to produce.
Alona Steinke		WSEC-R Heat pump proposals (065, 066)	Support	Gas appliances pollute both indoor and outdoor air and are not regulated. Gas stoves leak constantly in the home, so we need more ventilation. Has used a heat pump for over 40 years. Urge you to adopt one of the strongest building codes in the US.
Scott Ongley	Northwest Hearth Patio and BBQ Association	WSEC-R Electrification	Oppose	Here to talk about the electrification of the state. Insufficient or inaccurate data provided without regard to the impact on consumers, housing costs and supplemental heating. Four times as many people die from cold than heat. Fall and winter storms knock out power, and electrical demand goes up in the cold months. Free standing gas fireplaces do not require a blower. They are a popular backup heat source but need the natural gas infrastructure,
Rick Marshall		WSEC-R Heat Pump proposals (065, 066)	Support	Southwest WA builder who has been building all electric for over 30 years and supports the heat pump proposals. The biggest change in the past decade is increase in air conditioning, especially with the wildfires that don't allow for open windows to cool things off at night. Ductless systems work well and are more efficient. Our responsibility as builders is to make sure the homes we build don't have adverse impacts for neighbors or communities.
Christine Reid	IBEW 77	WSEC-R Workforce	Oppose	We provide power, generation, transmission, and distribution to 95% of the state. The rush to electrify will put a

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				strain on the system. This shouldn't be rushed and create dangers for workers. Worker safety and readiness should be a priority.
Mike Brown	IBEW 77	WSEC-R Workforce	Oppose	Should look at the impact on the grid and the workforce. The grid is already taxed and this will necessitate additional infrastructure during a time of labor shortage and supply chain difficulties. You also need to look at the siting of new lines and acquiring real estate. It takes 15-20 years to build new lines.
Russell Maier		WSEC-R	Support	In support of the updates. We need to reduce methane, a major source of indoor air pollution and contributor to climate change; and remove the toxic gases and particulates from gas stoves. This will help improve the health and quality of life.
Joe Deets	Mayor for City of Bainbridge Island (but speaking for himself)	WSEC-R Heat Pump Proposals (065, 066)	Support	Bainbridge Island has passed an ambitious climate action plan to reduce greenhouse gas emissions but needs help from state agencies to make progress. Asks the Council to adopt the updates for the residential energy code.
Paul Knox		WSEC-R heat pumps (065, 066)	Support	Speaking as an affordable housing consultant, landlord, small builder and modeler. I have installed ductless heat pumps in both new and older homes and found them to be cost effective and beneficial to the tenants. Eliminating gas is a necessity, and it will cost more in the future.
Rich Voget	Sierra Club	WSEC-R Heat Pump proposals (065, 066)	Support	Since June we've collected hundreds of signatures petitioning the Council to adopt these updates. Allowing gas utilities to expand the use of fracked gas into new residential construction would increase greenhouse gas emissions. The Climate Commitment Act requires cuts in greenhouse gasses, so the codes should support state law.

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				To meet these reduction goals, today's new buildings would need to retrofit from gas to electric, which would be more expensive. I urge you to move away from methane gas.
Mark Vossler	WA Physicians for Social Responsibility	WSEC-R	Support	Cardiologist and president of WAPSR. We are witnessing the impact of climate change and air pollution. Will send a detailed report. Burning gas produces dangerous levels of greenhouse gases and other pollutants, which increase the risk of asthma and as well as other health risks. These risk fall disproportionately on lower income households, where people are more likely to live in smaller dwellings. Since electric home heating and cooking is readily available and cost effective, there is no excuse to continue burning gas.
Annemarie Dooley	WA Physicians for Social Responsibility	WSEC-R Heat Pump Proposals (065, 066)	Support	Burning gas increases the risk of asthma in children and contributes to global warming. Wildfire smoke exposure increases ER visits for breathing problems. Please adopt the energy code updates.
Bob Cox	350 Yakima	WSEC-R electrification (065, 066)	Support	Urge adoption of the updates. The oil and gas industry has known for decades that oil and gas pollutes and compromises both air and water quality but chose to ignore the issue. We need skilled engineers and others to help solve the issue of shifting to clean and sustainable energy.
Sloan Ritchie	Cascade Built	WSEC-R Heat Pump Proposals (065, 066)	Support	We build very efficient homes and apartments beyond the standards being proposed here and they are economically and technically feasible. We stopped piping methane into homes; it isn't good for occupant health and it's one less utility to bring in. The best time to make these changes is during construction rather than an expensive retrofit.

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Tracy Ceravolo		WSEC-R	Support	We need to move away from fossil fuels. Heat pumps have a high coefficient of performance and can also cool homes and filter the air. I'm a convert to induction stoves, which perform like gas without toxic fumes but are easier to clean and safer to operate. Keeping fracked gas out of homes is the right decision, morally and financially. The costs of the climate crisis are high.
Steve Tapio	New Tradition Homes	WSEC-R: T R406; Heat pump space/water heating; EV charging	Oppose	Home builder in Vancouver who builds primarily above code homes. Concerned housing availability and affordability. The upgrades from a high efficiency gas furnace and water heater are costly and will price more people out of the market. Product availability is also a concern. The EV requirements should be in the electrical code. And the Council should reconsider the ERI proposal and allow it as an optional compliance path.
Charles Chesney		WSEC-R Heat Pump Proposals (065, 066)	Support	Please pass the proposed changes. There is an urgent need to incentivize heat pumps. They provide better indoor air quality and provide heating and cooling in the same unit.
Kristin Edmark		WSEC-R Heat Pump Proposals (065, 066)	Support	Please support the upgrades to the code. Electricity is better than methane or oil in terms of cost, health, efficiency and emissions. People who rent should not be forced to live in buildings that are unhealthy.
Simon Bakke		WSEC-R: Heat Pump Proposals (065, 066)	Support	The time to prepare for a fossil free future is today. Having more homes built with fossil fuel furnaces isn't going to solve the housing affordability crisis. Years of building with gas has not prevented affordability problems. I would love to be able to rent a place with a heat pump so I can cool my home in the summer. More funding is

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				available for clean appliances and energy.
Larry Andrews		WSEC-R: 065, 064	Oppose	Does not support the mandate for heat pumps. It costs close to \$8000 for a high HSPF heat pump to get the required points to meet the code. It becomes very expensive for low income. WWU dismissed the idea of converting from gas after studying the cost. The refrigerants used in these heat pumps have two thousand times more global warming potential than burning natural gas. Hold off for another cycle or two until the CO2 heat pumps come out. And the cost of energy will increase nearly threefold, as happened in California.
Chris Covert-Bowlds	WA Physicians for Social Responsibility	WSEC-R: Heat Pump Proposals (065, 066)	Support	Urge you to adopt the code and move away from methane in buildings. This is really important for addressing health impact of fossil fuels. Homes are the largest source of carbon and climate pollution, and that pollution can exacerbate breathing issues and lead to lung damage.
Karen Howe		WSEC-R: Heat Pump Proposals (065, 066)	Support	Retired from working in energy efficiency programs and support the proposed energy code updates. Heat pumps are the most energy efficient alternatives to air conditioners and furnaces, with annual heating energy savings of up to 50 percent. Heat pump water heaters are two to three times more efficient. Homeowners need help selecting these systems; builders will continue to install lower cost, less efficient systems.
Andi Hochleutner	CWHBA	WSEC-R	Oppose	Here on behalf of 650 members working across six counties. The changes will not help residents achieve home ownership and represent a cost burden. Please listen to those testifying today and those that can't be here and do not adopt. Consider identifying



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				procedural flaws and unnecessary modifications that add to the cost of housing. There are a lot of barriers besides cost for heat pumps such as noise, placement and availability. Adopt option 2 of the R406 table.
Ruth Sawyer		WSEC-R: Heat Pump Proposals (065, 066)	Support	Urge the adoption of heat pumps and increased ventilation requirements for gas stoves. These are a clear way to act on commitments to transition away from fossil fuels.
Bryan Ricker	Schweitzer Engineering Laboratories	WSEC-R	Oppose	The best way to support innovation is to not mandate a single solution but establish a regulatory framework to support new ideas. These codes are a step in the wrong direction. We need to ensure the grid is ready before pushing more demand. We shouldn't be pushing people to spend more money for less choices in their homes. Please pause action on the energy codes.
Jennifer Thomas	Spokane Homebuilders Association	WSEC-R	Oppose	We represent 800 members throughout Eastern Washington. I don't want to do anything to jeopardize our health, but I don't want to exacerbate the housing crisis. Price is important and we shouldn't price more families out of the housing market or drive up rent to drive our workforce from the area. I request that you prioritize the baseline economic analysis and do not implement more restrictions to drive up the cost of housing.
Tim Lovelass	Central Washington Homebuilders	WSEC-R	Oppose	We can't keep adding more regulation and expect to have affordable housing. Where we're at, we can't recoup the added costs to these homes. The last code change added almost \$25,000 to the cost of the average house. We also don't have the infrastructure to handle the increased electrical load if we eliminate natural gas. The cost of adding EV charges to every house puts a burden on lower income households

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				who can't afford to purchase these vehicles. And heat pump water heaters are not as efficient as gas.
Bill Sampson		WSEC-R: R403.13 and 403.5.7	Support	Urge adoption of the heat pump changes. They are necessary to meet the carbon reduction targets at both the local and state level to ensure a breathable, healthy future. There need to be improvements to the grid to ensure reliability, both for gas and electric.
Dennis Davis	WAACCA	WSEC-R: Furnaces / Heat Pumps (065, 066)	Oppose	As an HVAC contractor in Walla Walla, sold hundred of heat pumps in the 70's and 80's. The code is a continuation in the ideals of saving energy, but there is more to life than ideals. I am concerned with the increased price adding up to tens of thousands for new homes. Coupled with the increase in mortgage rates, we're pricing too many out of the market. There needs to be a delay in the heat pump mandate. The code needs to deal with the HSPF2 change, and if you will be able to reach these efficiency ratings.
Simon Vickery		WSEC-R: Heat Pump Proposals (065, 066)	Support	All of these proposals are good public policy and will improve air and water quality by no longer burning gas, and improve the indoor air quality. A lot of people have mentioned affordability and grid reliability, which are important concerns, but someone else's concern—the UTC, local municipalities and the state. I urge you to do the best for our buildings, health and environment.
Kenneth Zirinsky		WSEC-R: Heat Pump Proposals (065, 066)	Support	Urge adoption of this code to eliminate natural gas in buildings to improve the health of citizens and reach the statutory goals of energy consumption and greenhouse gas emissions.
Jeanette McKague	Washington Realtors	WSEC-R	Oppose	There are measures within the code we cannot support. The first is the definition change for residential

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				building. It needs further consideration regarding affordability and how the change will impact existing buildings. The second is the heat pump measures with its supply chain issues and impact on the electrical grid.
D Scott Peterson	NW Gas Association	WSEC-R: 066, 073	Oppose	The options table should go back to the TAG for reevaluation. It is a de facto ban on natural gas and moves into the arena of an energy policy that was defeated at the legislature. The supply chain issues have not been considered, nor the labor issues. The code is not being enforced, so you're not meeting the efficiency targets. And the legally required cost benefit analysis and small business analysis have not been done. These are your responsibility.
Chris Roberts	Shoreline City Council	WSEC-R: Heat Pump Proposals (065, 066)	Support	The Shoreline Council declared a climate emergency and is looking to implement carbon emissions reduction strategies including replacing fossil fuel systems with clean renewable energy systems for both new and existing buildings. We don't have the option of strengthening the residential energy code, so we're depending on you to help meet our goals and reduce emissions.
Dylan Plumber	Sierra Club of Oregon/Washington	WSEC-R	Support	On behalf of our 32,000 members and over 100,000 supporters, we urge the adoption of the energy code updates. It has a number of benefits for the community—electrification and the transition off fossil fuels, addressing the climate crisis, reducing inequity, and protecting public health. It will not dramatically increase the electric load, but gradually over decades allowing time for expansion and resiliency. The cost benefit analysis found that all electric homes cost less to build than mixed fuel homes. As we experience severe hurricanes, drought and

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				wildfires, its clear that the climate crisis is here now.
Ivan Velasquez		WSEC-R: Heat pump (065)	Oppose	I'm a sales representative at Fosseen's Home and Hearth. We have seen an increase in sales to customers with heat pumps, especially those with older units that have lost efficiency and don't heat well. They don't hold up as well as gas, wood or pellet stoves.
Paul Joannet		WSEC-R: Heat Pump Proposals (065, 066)	Support	As a former line cook, I can attest gas cooking is not as clean as a lot of people believe. I was lucky to leave that environment and move into the solar industry. I assert we need to take action now. The solar industry is booming, and the grid will compensate. And more people die in producing natural gas than from the cold.
<b>October 14 Public Hearing</b>				
Ty Jennings	Cascade Natural Gas	Equipment options	Oppose	See also Sept. 29 testimony Grid can't handle the load, no workers to add infrastructure. Brown outs. Won't accomplish anything if can't afford new homes.
Ryan Albrecht		WSEC	Oppose	Looking at an energy strategy to meet a guideline that is out of reach. Taking away too many options. Consumers need opportunities to make choices about energy. Supply issues around windows. Go back to 5 ACH. Bring back deeply buried duct option.
Melinda Hughes	Thurston Climate Action Team	energy code building electrification	Support	Hold a masters in environmental law. Help local governments by adopting the changes. Health and pollution dangers of methane. Moral duty to fight climate change.
Jessie Simmons	Olympia Master Builders	All Codes	Oppose	Pricing families out of homes. Is this the time to pursue the desire to be first in green energy.
Breck Lebegue	WA Physicians for Social Responsibility	electrify space/water heating	Support	New building codes can help prevent illness from combustion byproducts. Make the right choice for the future and good health indoors.

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Jani Hitchen		Heat Pump Proposals	Support	Think beyond our generation. All electric buildings typically cost less to build and less to operate. We must enact requirements that decarbonize our energy and heat sources and provide a way to retrofit older buildings.
Sarah Moore		Heat Pump proposals	Support	City Council member from Burien. Urge adoption. Purchased a new stove with a defect. When replaced, realized nighttime headaches were due to the gas stove. Currently have a heat pump and neighbors use their home as a cooling station in the summer.
Paula Sardinas	WA Build Back Black Alliance	Energy Code and Heat Pumps	Support	Coalition of 16 BIPOC CBOs serving WA. In support of the energy code and heat pumps. Marginalized communities experience inequities, with environmental impacts causing harm from where we work, live and play. We have an opportunity to send a message that we don't expect people to choose between bare necessities and basic human health.
Gordon Wheat		Energy Code Building Electrification	Support	Houses are being built tight and this doesn't allow indoor air pollution to escape without turning on a vent. This is an important safety measure. Decreasing the number of gas stoves reduces health problems.
Charlotte Persons		Heat Pump proposals	Support	We have a change to make a big impact on the future by moving away from gas, reducing greenhouse gas emissions, improving health and providing long term heating and air conditioning at a lower cost. The heat pump I installed in the 80's had an 8 year payback. Now the initial cost is less and payback is faster.
Cathryn Chudy		Heat Pumps	Support	The gas company is providing deceptive, misleading information on renewable natural gas and ignoring the growing evidence of the harms of burning gas. Urge adoption; moving

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				away from methane is a necessary step to address climate crisis and protect our community public health.
Forest Wilson	Olympia Master Builders	All Codes	Oppose	Runs a countertop company and has lost employees who couldn't afford the cost of living in WA. This is not the time to be adding to the cost of building homes.
Elsie Sabel		Heat Pumps Proposal	Support	High school student in Olympia. Urge adoption. Having grown up with climate change, the dread is now worsening as I realize how little is being done. Emissions have to peak by 2025 to stay below the 1.5°C mark. Waiting another three years to pass this may be too late. Do this for me and every young person in the state.
Lisa Ornstein		heat pump proposals	Support	Olympia resident whose husband died during the heat dome last year. It is critical to address climate change. Heat pumps will help keep vulnerable people safe, especially in apartments.
Kai Fyrst	Olympia Master Builders	All Codes	Oppose	Been in the construction industry for 23 years. My employees and neighbors are being priced out. Don't want to sacrifice quality, but that means competing for materials.
Kaylee Galloway	Whatcom County Council	WSEC-R: Heat Pump proposals	Support	Whatcom County sent in a letter of support. Support a residential energy code that will help our communities decarbonize while addressing the climate change, air pollution, sustainability, equity and health. Whatcom Co. has experienced the effects of climate change, with heat waves, drought, wildfires, flooding and other severe weather events.
Daniel Kadden		WSEC-R: Heat Pump proposals	Support	Deeply involved in affordable housing issues for many years. The immediate impact of homelessness and housing needs are often overwhelming. But we need to look at the long term connections between affordable housing and clean energy. All electric

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				construction will have tangible positive effects on finances, health and safety, especially for the more vulnerable citizens.
Jessica Zimmerle	Earth Ministry / WA Interfaith Power & Light	WSEC-R: Heat Pump proposals	Support	The smoke has been weighing us down and we think asking the children and vulnerable people to stay inside will help keep them protected, but indoor air quality can be 2 to 5 times more polluted. We want to see more clean air in our homes and action against the climate crisis.
Janet Hedgepath		WSEC-R: Heat Pump proposals	Support	We need to stop debating on whether various proposals are too radical or too soon and take action on climate change and carbon emissions.
Lisa Parshley	Olympia City Council & Climate Solutions	IMC/WSEC-R	Support	Referenced a letter from the City Council, signed by the Mayor, submitted earlier. Two thirds of our carbon footprint is from the built environment. This is not just about climate change, but a sense of equity. We need to address climate change if we're going to provide for a diverse and equitable society.
Monica Zazueta		WSEC-R: Heat Pump proposals	Support	Moving away from methane is important for addressing the climate change, health, equity and the future of our children. What we do over the next 3-4 years will determine the future of humanity.
Rachael Weasley		WSEC-R: Heat Pump Proposals	Support	As we see more extreme weather, a well insulated home with a heat pump will be much safer and do a better job at maintaining air temperatures and indoor air quality during heat waves and wildfire smoke. Concerned about building new gas infrastructure as we are hoping to reduce carbon emission. There is already a housing affordability crisis with fossil fuel furnaces, which, if anything, has contributed towards it. Safe air is necessary for our children.

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Rep. Davina Duerr		WSEC-R	Support	I support a residential energy code that requires electric heat, pump technology for water and space, heating as the fossil fuel Counterparts of these appliances account for the majority of emissions in the building sector. As a legislator, I'm committed to solve climate change by lowering Washington's greenhouse gas emissions, helping my constituents in our State be healthier and more resilient. The Legislative Directive is clear, and the council can meet that legislative intent by establishing a pathway to a clean electrification of our homes.
Eric Pravits	Homestead Community Land Trust	WSEC-R: Heat Pumps	Support	Decarbonizing our newly constructed homes is critical to creating a healthy indoor environment. Better energy efficiency brings down the total cost of home ownership, which helps low income home buyers, who are often the most impacted by climate change. The time to act is now.
Cory Eckert		WSEC-R: Heat Pump Proposals	Support	I've specialized in installing ductless heat pumps for 10 years. Many of those went to Habitat for Humanity homes in Thurston, Pierce and Kitsap counties. When analyzing affordability, you need to look at the cost to build and the cost to live in the home. A study by Tacoma Power concluded that cost for ductless heat pumps was fully recovered in less than 5 years.
Annie Phillips	Burien People for Climate Action	WSEC-R: Heat Pump proposals	Support	We applaud your updates to the residential energy code. Global warming is not nature—we did this and we need to undo it. This will go far to make our new homes healthy and green for future generations.
Pam Clough	Environment Washington	WSEC-R: Heat Pump Proposals	Support	We urge you to approve the update. In 2019 the state established a goal to transition the grid to 100% clean energy by 2045. In doing so, we also



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				have the opportunity to decarbonize for our health and to reduce emissions. We're creating healthy homes and honoring the climate commitment.
Bryan Ricker	Schweitzer Engineering Labs	WSEC-R	Oppose	See Sept. 29 testimony
Caitlin Krenn	WA Environmental Council	WSEC-R: Heat Pump proposals	Support	Our 100 year old home has a lot of character, but it takes substantial cost to bring it up to date, including heat pump technology. There is no reason that homes built today should lock future residents into costly retrofits or breathing toxic fumes from gas furnaces and stoves.
Phyllis Farrell		WSEC-R	Support	The transition to all electric systems in new buildings is an important component to meet the state's goals in reducing carbon emissions and addressing climate change. The proposed codes will have long term benefits; transitioning to all electric is achievable, affordable, safe and creates a more resilient energy system.
Akil Wereded		WSEC-R: Heat Pump Proposals	Support	We have a moral obligation to reduce carbon emission. We inherited this problem from our parents and shouldn't pass it on to the next generation.
Tom Crawford	Thurston Climate Action Team	WSEC-R: Heat Pump proposals	Support	Expanding the use of heat pumps and reducing gas will help save residents money on utility bills, improve health and improve home safety with air conditioning on hot days. Pay special attention to tribal voices.
Naghmana Sherai		WSEC-R: Heat Pump proposals	Support	See Sept. 29 testimony
Andrea Scott-Murray		WSEC-R: Heat Pump proposals	Support	The paramount purpose of building codes is to support the health and safety of the occupants. Health and safety have to come first; not just personal health and safety but that of our species on this planet.
Wendy Krakauer		WSEC-R: Electrification	Support	I want WA to remain livable for my grandchildren. I replaced my furnace

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				two years ago and no one told me I could have installed a heat pump instead. No one told me how harmful natural gas is to the environment. Our state's legislative commitment cannot be achieved if we continue to expand fossil fuel infrastructure.
Robin Vasquez		WSEC-R	Support	The Lacey City Council adopted a policy protecting trees—many of those trees are dying because of climate change. I urge you to act similarly and adopt the proposed code. It is good for the environment, good for people and good for the sustainability of our towns and cities. Help keep WA green for the kids and protect their future.
Donna Albert		WSEC-R: Heat Pump proposals	Support	Please adopt the updates. All electric homes are safer for the climate and healthier for occupants. There are other harmful chemicals in gas leaks that can asphyxiate, poison, catch fire or explode. Electrification is an important part of an effective greenhouse gas reduction strategy that also has health and safety benefits.
Ty Stober	City of Vancouver	WSEC-R	Support	Asking you to pass the updates. Vancouver has passed an aggressive goal of reducing greenhouse gas emissions by 80% by 2030 and being carbon neutral by 2040. Building stock plays an important role in that.
Iris Antman		WSEC-R: Heat Pump proposals	Support	I'm urging the council to adopt the updates. The time to end fossil fuel use is now. The consequences of global warming will only get worse. We're reaching the tipping point.
Jim Lazar		WSEC-R: Heat Pump proposals	Support	Retired economist who served on the TAG in the past. In 1979, 1986 and 1993, there were giant steps forward in the energy code. All of that is old hat now, and we've saved millions of dollars, and a lot of energy and carbon pollution. These changes are also groundbreaking. Be as courageous as

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				your predecessors in moving the code forward.
Steve Albrecht		WSEC-R: Electrification and Heat Pump Proposals	Support	Much of the testimony today has addressed how important it is to adopt these updates. No free lunches—we cannot burn fossil fuel without paying a price. Penny-wise and pound foolish, quality costs ten percent less, and it’s less work if you do it right the first time. We’ve made a mess of our environment and our climate, and it is time to clean it up.
Albert Rooks	Passive House Northwest	WSEC-R: 065, 066	Support	I’m here to express support by the entire membership for the residential code proposals. As the CEO of Small Planet Supply, we’ve set up a facility to produce heat pumps here in Thurston County. From the economic standpoint of the cost of living in Thurston County, we will bring in an estimated \$20 million annually and provide high tech jobs and skilled manufacturing.
Andrea Smith	BIAW	WSEC-R	Oppose	See also Sept. 29 Testimony We urge you not to pass the HP proposals. There are issues around the powerlines and the lack of line workers and housing affordability, with this adding up to \$24,000 to the price of homes, and increasing the risk of wildfires from powerlines. Utility bills will increase and cost homeowners more money. On changing the definition of residential building, moving low rise to the commercial code may open up legal action based on the conflict with the commercial code.
Chris Fuess		WSEC-R Heat Pump Proposals	Support	Heat pumps are more efficient and cost about the same. Right now we’re seeing the effects of depending on a single fuel source in the EU and the Russian control on natural gas. This is the most important issue of our time. The long term effects of climate change

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				are nearly irreversible. This proposal is a step in the right direction for future generations.
Michael Laurie		WSEC-R: Heat Pump Proposals	Support	I've seen people who made energy efficiency changes and were happy with the results. I've also seen people who are not motivated to address climate change, which to me make its important to make this change to transition away from fossil fuels to clean energy. We're running out of time. These are well-proven solutions that are relatively easy to implement.
Judy Hopkinson		WSEC-R: Heat Pump Proposals	Support	We have installed both solar panels and heat pumps. They have more than paid for themselves. It seems as though allowing dwellings to be built without heat pumps and at least the capacity to install solar panels is just another way to increase the wealth gap in this country. It is abundantly clear that the use of gas heating and appliances increases the risk of serious illness. There is always resistance to change, even when necessary. But financial concerns don't outweigh safety and health.
Noelle Lovern	BIA of Clark County	WSEC-R	Oppose	160K families will be priced out of the housing market. 85% of Washingtonians cannot afford a home. The current cost of codes, regulations and fees in Clark County is approximately \$135K. Is this the time to add more cost? We are fueling a human tragedy if we don't balance net zero with the basic human need for shelter before moving forward with these updates.
David Camp	350 Spokane	WSEC-R: Heat Pump Proposals	Support	This is the cheapest way to meet our state goal of reducing emissions. HP are more cost effective than gas, often cutting heating bills in half, and provide cooling. Federal tax cuts make it even better. Owners and renters love HP

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				savings, but builders don't see these long term benefits. Heat pumps are installed in 48% of new homes. They are the most cost effective solution we have.
Kurt Wilson		WSEC-R	Oppose	HP are more efficient, but there is a cost to that. The electrical grid is not equipped to handle the load from electrification. You think this will somehow put a dent in global greenhouse gas emissions, but the rest of the world counteracts these efforts. This is being done at the expense of roofs over people's heads. Electric rates will certainly be higher in the future and there could be rolling blackouts like California. We're increasing regulation unnecessarily without a cost benefit analysis.
Nick Engelfried		WSEC-R	Support	Climate change is here. Water levels are falling, affecting salmon. This is a crisis. We need to curb carbon emissions for a healthy environment. These code updates are a big step in the right direction.
Michel Maupoux		WSEC-R: Heat Pump Proposals	Support	Clean electricity, including heat pumps, is better for the planet. It reduces greenhouse gas emissions to slow down climate change. It is better for safety, as it poses no danger in the case of earthquake or power outage. It's better for consumers, as it is cheaper to operate in the long run. The building code should keep pushing on energy efficiency.
Mike Petersen		WSEC-R: Heat Pump Proposals	Support	Heat pumps are 450% efficient versus a gas furnace at 95% efficient. Nearly half the new multifamily buildings in the US have heat pumps, and nearly 40% of single family. As a bonus, heat pumps provide cooling in the summer. They can accommodate the high and low temperatures Spokane has, and can run

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				down to ten below. They cost between \$8-16K, and have rebates up to \$7.5K.
Cristina Mateo		WSEC-R Heat Pump Proposals	Support	See September 29 testimony
Bob Disney	Disney & Assoc	WSEC-R: Heat Pump Proposals	Oppose	Currently in Kitsap County I have the least expensive starter homes—the cost is around \$246/ft <sup>2</sup> . We’ve priced them with no profit to allow some first time home buyers a chance to buy a home. We don’t have any buyers. Only 15% of the people in Washington can afford to buy a home. This would take even more buyers out of the pool. The cost for the refrigerant used in heat pumps has gone up \$195 in the last year, and China is the sole provider. We should probably mandatorily adopt heat pumps, but should spread it out over time to keep the costs down.
John Frankel	NW Natural	WSEC-R Heat Pump Proposals	Oppose	You should be informed by data, not dogma. We don’t have the cost analysis to show that heat pumps are cost effective and that there are no negative impacts on housing affordability or commerce. These changes would save only a small amount of carbon emissions. The Climate Commitment Act mandates that gas utilities decarbonize as well, and we filed detailed plans with regulators on how we will comply. If you don’t believe there is a data-informed reason to restrict fuel choices, you shouldn’t approve the changes.
Deborah Hannig		WSEC-R	Oppose	The real cost is for families at risk. You are creating an environment where consumers have no safe backup heating to protect their lives. Free standing gas stoves and fireplaces are a low cost non-electric option that has worked for decades. The code needs to allow for new gas lines to new homes.
Keith Sanderson		WSEC-R: Heat Pump Proposals	Support	As a future healthcare provider, it is absolutely essential that we remove gas

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				from homes. The climate crisis is already wreaking havoc in our communities. Related health events are overloading hospitals and overworking medical professionals and lowering the quality of life for many families. Heat pumps would reduce the reliance on fossil fuels and lead to cooler, more efficient buildings.
Robert Marino	Thurston Climate Action Team	WSEC-R: Heat Pump Proposals	Support	A 9.0 or larger earthquake has a 17% chance of devastating Western Washington in the next 50 years. The leading cause of gas pipeline explosions is falling ice. What will happen when we have falling buildings. We have safer alternatives.
Ray Allshouse	City of Shoreline	WSEC-R	Support	Speaking on behalf of the City Council of Shoreline. We're 100% behind this. The legislature is depending on your actions to further progress on their energy savings goal. Due to the mini-maxi restrictions on the residential energy code, we look to the council to adopt more stringent requirements that we can't pass locally.
Warren Sheay		WSEC-R Heat Pump Proposals	Support	I strongly urge you to adopt the updates. You've already heard dozens of fact-based reasons to do so. Eliminating methane gas in new homes will reduce climate pollution. I beseech you to make these crucial changes for our kids and grandkids.
Larry Luton	350 Spokane	WSEC-R Heat Pump Proposals	Support	Buildings are the fastest growing source of greenhouse gas emission; much of it to heat buildings and water. Please adopt a new energy code requiring electrification.
Alejandra Cunningham	NRDC	WSEC-R Heat Pump Proposals	Support	Fossil fuel burning damages our environment and health. The requirements before you will make it easier for homes and buildings to be built all electric from the start, making them more efficient and affordable.

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Pat Braddock		WSEC-R	Oppose	Member of the NW Hearth, Patio and Barbecue Association and owner of Kirkland Fireplace. Consumers want options. They want the ability to heat their homes when there is no power. Gas is less expensive to install and operate than propane or wood products. What will be the effect on small businesses selling or servicing gas appliances?
Judson Willis		WSEC-R Affordability	Oppose	I spoke four years ago about where we would be today, about how affordability will affect WA. With the recent increase in loan rates, the average income can only afford a \$322K home, which you can't find on the market today. I would like to see a performance method put into the code so we don't have to chase credits and make it more affordable for everyone.
Joseph Szwaja		WSEC-R Heat Pump Proposals	Support	Sang a song in support of the changes and the need to electrify.
Devon Kellogg		WSEC-R: Heat Pump Proposals	Support	My family relies on opening the windows to cool the house during the night. With the warm temperatures and smoke, the house becomes intolerable to toxic. As an asthma sufferer, my hands and feet swell and breathing becomes labored. The cost of the upgrade is nothing when faced with costly upgrades just to protect my and my family's basic health.
Leslie Kenefick	Health Equity Circle / Environmental Justice Action Team	WSEC-R: Heat Pump Proposals	Support	Health Equity Circle is a multi-state student lead organization addressing health equity. The impacts of gas disproportionately affect low income communities and those who rent. Fracking directly impacts indigenous communities who may not have a say in those practices.
Jeffery Short		WSEC-R: Heat Pump Proposals	Support	I want the Council to understand the role of the State in mitigating the ongoing climate crisis. The council updates the code every three years. We



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				can't wait another three years, go through another three years of wildfires, droughts and floods. Give our state's future graduates a world that's worth living in.
Don Orange		WSEC-R: Heat Pump Proposals	Support	Our job is to preserve a decent place for our kids to live. We need to rise to the challenge and be the adults in the room.
Luke Howard	Commerce	WSEC-R	Support	Speaking in support of the package of proposals. They reflect the necessary changes to meet RCW 19.27A.160. They also align with the recommendations of the State Energy Strategy for the building sector. Incremental improvements in the residential code are important to provide broad benefits to all housing types at the least cost to implementing energy efficiency and carbon reduction.
Carolyn Logue	Washington Air Conditioning Contractors Association	WSEC-R	Oppose	We'd like to express concern over the heat pump mandate. L&I doesn't allow specialty electricians to connect the indoor and outdoor units of ductless mini splits. This needs to change before you mandate HP, or you'll have a workforce problem. Now, you have the technician run the refrigerator lines in the walls and leave it open until the electrician can come out and hook them up. There are also the supply chain disruptions previously discussed.
Seth Vidaña	City of Bellingham	WSEC-R	Support	Bellingham has made progress passing local codes to meet our carbon reduction plan, but are preempted from making changes to the residential codes. Also want to acknowledge that the electrification changes will lead to new jobs.
Jennifer Thomas	Spokane Home Builders Association	WSEC-R	Oppose	See Sept. 29 Testimony
Mike Nykreim	MBAKS	WSEC-R	Oppose	Captains lead from the front—electrify yourselves before requiring it of others.

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Robin Briggs		WSEC-R: Heat Pump Proposals	Support	Heat pumps are a better solution. They're better for the residents, will provide cleaner air, and will providing cooling in the summer. We need to pay heed to what's going on around us. This is a small step towards a better future.
Dalton Smith	Conner Homes	WSEC-R	Oppose	Our industry is facing supply chain issues. The code doesn't provide enough flexibility to work around those issues. The state is ranked low for solar power potential and the aging grid causes concerns. Hybrid HP hot water heaters can't provide enough hot water for families unless they're in full electric mode.
Kevin Duell	NW Natural	WSEC-R 080	Oppose	Specific to the requirement for water heaters to be installed within the thermal envelope. Gas heat pumps are allowed for both space and water heating. Gas HP WH are designed to be outdoors and have virtually no standby losses. A cost benefit analysis of 080 would fail if these were taken into consideration. Suggest you add an exception for gas HP WH with a UEF of 1.5 or greater to prevent a potential statute violation.
Gary Heikkinen	TAG member rep for gas utilities	WSEC-R	Oppose	Take a close look at the <a href="#">minority reports</a> —they represent practical and reasonable alternatives to some controversial proposals. 1) change the emission metric for electricity; 2) disapprove the HP proposals; 3) modify or delete the fuel normalization table.
John Rothlin	Avista Corp	WSEC-R	Oppose	Urge the rejection of the proposals that restrict heating technologies. They warrant further analysis and should be held over to the next cycle. Look at cost, regional climate conditions, training and education. Avista supports thoughtful decarbonization but not the elimination of energy choice or affordability.

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Scot Hattenburg	NUCA of Eastern Washington	WSEC 401.2	Oppose	The future is hydrogen, which will be transported via gas lines. This proposal will remove that potential. The electrical grid is overgrown. You need to look at the duck curve. Example of an employee that installed a HP in a shed and had \$600 monthly bill compared to a gas boiler that ran \$70 per month.
Natasha Jackson	NWGA	WSEC-R	Oppose	Consumers have the right to choose the type of energy that best suits them. The dependability of the electric grid is in question and this will put consumer lives on the line when the power fails. Equity and small business impact—do a survey before enacting this. This also affects affordable housing. Equity should be at the forefront of this process.
Danielle Jokella		WSEC-R: Heat Pump Proposals	Support	We need to move away from fossil fuels. The risks outweigh the benefits. Many people were killed or evacuated due to gas leaks or explosions. We need to future proof our energy use and tackle the housing crisis. It reduces the amount of infrastructure required to be maintained and looked after.
Brian Emanuels		WSEC-R: Heat Pump Proposals	Support	Thank you for listening to so many members of our community—elected officials, health professionals, builders, architects, faith leaders, affordable housing advocates, etc. both in person and submitted in writing. To meet the legislative mandate, it is imperative to require heat pumps. We have to stop building with gas and piping it into our homes. The cost analysis shows that HP will reduce utility bills.
Sen. Liz Lovelett		WSEC-R	Support	We've witnessed unprecedented floods, wildfires, droughts and heat waves that have costs lives and economic disruption across the area. All of these are a result of climate change and the changes in our overall

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				weather pattern. We need to decarbonize our built environment. We need to make sure we are reducing the demand and ensuring folks have the opportunity to have the lowest energy cost possible. I urge you to adopt the updates.
Margo Hill		WSEC-R	Support	Emissions from buildings are the fastest growing source of greenhouse gas emissions. We are now dealing with extreme environmental issues as a result of climate change—the acidification of oceans, wildfires, air quality, increased pressure on water systems. This can go a long way to helping with emissions and climate change.
Dusty Rhodes		WSEC-R	Support	I support the HP proposals as well as anything else we can do to support the environment. Scientists are saying we’ve spent the last 40 years not facing reality and we need to take steps to save the planet from collapse.
John Saunders		WSEC-R	Support	Moving away from methane gas in our buildings is important to address the climate crisis. The state energy strategy found that electrifying homes is the lowest cost way to meeting the state’s emission reduction goals. All electric homes are a robust and market ready solution. These updates ensure that the homes we’re building now are sustainable and responsible.